

Notice of Allowability

Application No.

10/080,968

Examiner

St. John Courtenay III

Applicant(s)

WOLFF ET AL.

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed Feb. 22, 2002.
2. ☒ The allowed claim(s) is/are 1-32.
3. ☒ The drawings filed on 22 February 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

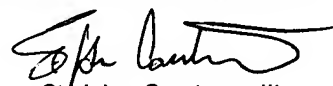
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date May 3, 2002
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


St John Courtenay III
Primary Examiner
Art Unit: 2126

Examiner's Statement of Reasons for Allowance

The claims are allowable over the prior art of record for at least the following reasons:

As per independent claim 1:

The prior art of record does not teach, nor fairly suggest, transmitting messages among the nodes with respect to local support of an itemset in the respective partitions of a database, and, responsive to the messages transmitted by a subset of the nodes, determining the itemset to be globally frequent in the database before the nodes outside the subset have transmitted the messages with respect to the local support of the itemset in their respective partitions, as claimed.

As per independent claim 17:

The prior art of record does not teach, nor fairly suggest, computing an initial candidacy criterion at each of the nodes, for use in determining whether an itemset is globally frequent in the database and responsive to the candidacy criterion, transmitting a first message from the first node to the other nodes conveying a local support of the itemset in the first partition, and, upon receiving the message, recomputing the candidacy criterion at the second node responsive to the local support conveyed by the message, and transmitting, responsive to the recomputed candidacy criterion, a second message from the second node to the other nodes, conveying the local support of the itemset in the second partition, as claimed.

As per independent claim 26:

The prior art of record does not teach, nor fairly suggest, the use of nodes being adapted to transmit messages with respect to local support of an itemset in the respective partitions of a database, and responsive to the messages transmitted by a subset of the nodes, to determine the itemset to be globally

frequent in the database before the nodes outside the subset have transmitted the messages with respect to the local support of the itemset in their respective partitions, as claimed.

As per independent claim 27:

The prior art of record does not teach, nor fairly suggest, the use of nodes adapted to complete an initial candidacy criterion, for use in determining whether an itemset is globally frequent in a database, such that responsive a candidacy criterion, the first node transmits a first message to the other nodes conveying a local support of the itemset in the first partition, and such that upon receiving the message, the second node recomputes the candidacy criterion responsive to the local support conveyed by the message and transmits, responsive to the recomputed candidacy criterion, a second message from the second node to the other nodes, conveying the local support of the itemset in the second partition, as claimed.

As per independent claim 28:

The prior art of record does not teach, nor fairly suggest, the use of nodes that transmit messages with respect to local support of an itemset in the respective partitions of a database, and responsive to the messages transmitted by a subset of the nodes, to determine the itemset to be globally frequent in the database before the nodes outside the subset have transmitted the messages with respect to the local support of the itemset in their respective partitions, as claimed.

As per independent claim 29:

The prior art of record does not teach, nor fairly suggest, the use of nodes to compute an initial candidacy criterion, for use in determining whether an itemset is globally frequent in a database, and responsive the candidacy criterion, causing the first node to transmit a first message to the other nodes conveying a local support of the itemset in the first partition, and

causing the second node, upon receiving the message, to recompute the candidacy criterion responsive to the local support conveyed by the message and to transmit, responsive to the recomputed candidacy criterion, a second message to the other nodes, conveying the local support of the itemset in the second partition, as claimed.

As per independent claim 30:

The prior art of record does not teach, nor fairly suggest, the steps of: responsive to the messages transmitted by a subset of the nodes, determining the itemset to be globally significant with respect to a decision to be made in reference to the database before the nodes outside the subset have transmitted the messages with respect to the local information regarding the itemset in their respective partitions, as claimed.

As per independent claim 31:

The prior art of record does not teach, nor fairly suggest, computing an initial candidacy criterion at each of the nodes, for use in selecting an itemset in a database of potential significance to the decision, and responsive to the candidacy criterion, transmitting a first message from the first node to the other nodes conveying local information regarding the itemset in the first partition, and, upon receiving the message, recomputing the candidacy criterion at the second node responsive to the local information conveyed by the message, and transmitting, responsive to the recomputed candidacy criterion, a second message from the second node to the other nodes, and conveying the local information regarding the itemset in the second partition, as claimed.

Application/Control Number:
10/080,968
Art Unit: 2126

Page 5

Any comments considered necessary by Applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Applicant's claim for priority under 35 U.S.C. § 119(e) with respect to provisional application 60/271,165, filed Feb. 23, 2001, is acknowledged.

Application/Control Number:
10/080,968
Art Unit: 2126

Page 6

How to Contact the Examiner:

Any inquiry concerning this communication or earlier communications from the examiner should be directed to St. John Courtenay III, whose telephone number is 571-272-3761. A voice mail service is also available at this number. The Examiner can normally be reached on Monday - Friday, 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, An Meng-AI who can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

All responses sent by U.S. Mail should be mailed to:

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

**PTO CENTRAL FAX NUMBER:
703-872-9306**

- Any inquiry of a general nature or relating to the status of this application should be directed to the **TC 2100 Group receptionist: (571) 272-2100.**


ST. JOHN COURTENAY III
PRIMARY EXAMINER